CORRELATION AND TECHNICAL SEQUENCE.

ELIZABETH EUPHROSYNE LANGLEY,
THE UNIVERSITY OF CHICAGO SCHOOL OF EDUCATION.

Is technical sequence interfered with by the practical application of the principles of correlation? This is a question often asked, and usually with the implication that correlation and technical sequence are in their nature opposed.

The term "correlation" has come by misuse to imply so much of sentimentality and personal idiosyncrasy that it can be used only guardedly and with full definition. To the untrained teacher grasping after new ideas the word "correlation" seems to mean a haphazard throwing together of ideas presumably related — a method whereby the work of each day determines the work of the next day, with no reference to any larger plan. The uninitiated teacher who, with a few hours at her disposal, endeavors to gain from a school of so-called advanced pedagogical ideas some practical conception of the magical word "correlation," watches teacher and pupil, and wonders by what necromancy or inside information or expert mind-reading the teacher knows just the psychical moment in the child's mind when reading should give way to clay-modeling, and clay-modeling, in its turn, to mathematics. I am quite sure that the only definite ideas this visitor takes away are, that correlation is only a happy alternation of mental and manual labor, and that the child's will rules.

Correlation cannot, however, be so lightly dismissed. True correlation is an interrelation of subject-matter from the standpoint of education. It endeavors to find out the essential kinship of certain portions of the subject-matter in the curriculum, but the chief attention is focused on the child, so that these related materials may be properly adjusted to the various periods of his development. The scheme is planned to keep pace with his growing powers, and it allows great freedom and flexibility to meet individual needs. True correlation thinks of the child as the center, and endeavors to bring him into touch with the greatest

possible number of the forces that work about him. The endeavor is to make the child alert to these forces, and, so far as may be, himself to manipulate some of them. Correlation is not, then, a method of teaching by inspiration, a method depending on the happy instinct of the moment, but it is an ordered scheme. It implies definite, coherent, systematic, well-knit plans; in a word, it means organization.

"Technique" is only another name for the skill requisite to produce workmanlike results. Sequence of technique in woodworking is the arrangement of articles to be made in such an order that any given process shall succeed processes of less difficulty. Technique as an aim and technical sequence as a demand find their best illustration in the Russian system which puts its stress on processes as such rather than on completed articles. According to the Russian ideal, good technique is its own reward for being. The acquirement of technique is an isolated thing; it considers itself alone; its aim is single. If fine adjustment of tool to material results in an excellent series of exercises, its purpose is attained. Its plans are definite and unvarying.

Now, it would seem that a scheme so rigid and inflexible in its methods, so single and dominant in its aim, could not be perfectly conserved, and yet fit into a scheme so pliant and so complex and so sensitive to varying needs as is correlation. But the whole statement is based on a false assumption, namely, that only by a rigid attention to technique for its own sake can a high degree of technical skill be obtained. Experience, however, shows that only now and then is there a child that can be roused to do the best that is in him by the appeal of pure technique. Such an appeal is intellectual in its nature and belongs to a later stage of development. The child's best workmanship, even when judged by purely technical tests of excellence, follows in the line of his keenest interest. If a task is set for a boy by the teacher, from the point of view of the teacher, it becomes to the boy merely an exercise, and therefore a bore. To take the simplest possible illustration: a child may be taught to saw and plane and chisel till he knows how to saw and plane and chisel, and it can all be done on pieces of wood that are thrown away when the exercises are

learned. But he will learn these operations, not only with more happiness by the way, but also more quickly and accurately, if he is compelled to do the tool-work well in order to complete a sled or a house, or any article in which he has particular delight and which will be a permanent possession. Even a series of models planned by the teacher and imitated by the child is too rigid and artificial. The child *imitates* rather than *creates,* and this fact alone greatly lessens the educational efficiency of the system. It is unbelievable that the interest of a body of children should follow a series of models as it would follow articles of individual selection. For example, when it comes to making rulers, two children may have some especial interest in that model, but to the rest of the class it is an exercise. And I must insist that the quickest road to good workmanship is the road of interest.

One caution is undoubtedly needed here. Rousing the child's interest by giving him freedom of selection in the article to be made does not imply absolute lack of direction. It is the province of the teacher to see that whatever the child chooses to make he makes well. Hasty, shabby, dishonest work is non-educational, and should not be allowed. But, as a rule, when the child once feels, not only the freedom, but the responsibility, of his choice, he puts his best and most eager and persistent effort into it, and secures the best results possible to him.

What has so far been said is that excellence of technique follows most easily and naturally and certainly along the path of interest. Now, no scheme of education has been devised whereby the interest on the part of the children is so general, so sustained, and so fruitful as in correlation. The idea of correlation is not that the child is preparing for life, but that he *is* living, and the aim is to surround him with natural conditions, and then watch and direct him as he develops under these conditions. The way in which correlation stimulates interest in the special departments of hand-work may be illustrated by a single example drawn from the work of the first grade.

The development of the home was the center of thought and work for one year. The special teacher of wood-work planned with the children and the grade teacher the kind of house which

should be made. The children decided upon its shape and approximate size. All of the time allowed for special work was spent in the wood-working department until the house was finally put together. Then the children wished to furnish it. The making of designs for wall paper, for rugs, and for furniture came next in order. Here was the need for drawing, and that subject now occupied all the periods set apart for special work. But the drawing teacher worked in full co-operation with the grade teacher and with the special teachers who would hereafter aid in carrying out the plans. In the making of these designs full opportunity was given for inventiveness in form and color. The only suggestions given the children came through samples of artistic wall paper hung about the grade room, without comment. When the designs were ready, the children began the weaving of rugs in the various materials of their individual choice, and the painting of their wall paper. Later they returned to the wood-working room for the construction of their furniture.[1] Thus the time set apart for special work was divided among three departments — drawing, wood-working, and weaving — but all under the control of the central idea emanating from the grade room. The interest was cumulative. Each new day added to the interest of the day before. The children wove rugs, painted wall paper, built houses, and made furniture with unflagging zeal, surprising energy, and with results of workmanship amazing for children six or seven years of age. Each completed house, neatly painted on the outside, with stairs and an attic, and a full complement of doors and windows, with stained floors and flowered walls, with rugs and curtains, with chairs, tables, and settles, meant more to its owner, its *maker,* than any house that could belong to him in later life. It was a concrete embodiment of his thinking and doing for a year. He had thought of something, he had made it, he could look at it, he could keep it. In the process of making, his fund of knowledge had been largely increased, his powers of observation quickened, and, further, his skill in hand-work in three directions had been, by the way and incidentally, as it were,

[1] The plan had been for the children to make this furniture in cardboard, but they objected, saying they wanted wood because that would last.

but most really, increased more than it could have been had the whole attention been put upon the hand-work apart from the correlated idea.

What I have tried to say is that correlation in the elementary school does not only not interfere with technique, but that through the avenues of interest it results in a technique of superior quality. And I have meant to imply that correlation is a larger thing than technique, and that it also has many features of great educational value not thought of in any system where technique is pursued for its own sake.